#### Recreation

Union City Reservoir is the perfect site for a picnic with family and friends. Visitors can relax in the quiet rural surroundings and enjoy the scenery and view of the dam. Picnic tables, grills, and restroom facilities are provided and disabled visitors will find the tables and restrooms wheelchair accessible.

The Union City Reservoir provides visitors with the chance to enjoy a number of outdoor recreational opportunities. The different types of habitat and ecosystems that can be found at the reservoir provide hikers, bird watchers and the novice naturalist with a variety of flora and fauna to discover and enjoy.

French Creek entices many fisherman to the project to test their skills against game such as northern pike, walleye and muskie. There is also an abundance of smallmouth bass and panfish in the creek and trout in many of the creek's feeder streams.

Hunting is a popular pastime at the Union City Reservoir. Deer, turkey, small game, and waterfowl are plentiful and provide hunters with exciting opportunities and experiences.



### Lake and Dam Statistics

Location: On French Creek, about 71.5 upstream from its junction with the Allegheny River at Franklin, Pa. The reservoir is located entirely in Erie County, Pa.

Total Area:	2,684 acres
Drainage area above dam:	222 sq. mi.
Construction costs:	\$14,559,000

#### Dam

Type structure: Rolled earth embankment type
Maximum height above streambed: 88 ft.
Total length: 1,420 ft.
Maximum width at base: 560 ft.
Outlet works:

Uncontrolled 8' x 14.5' concrete conduit at base of dam Uncontrolled side-channel spillway at the right abutment of the dam

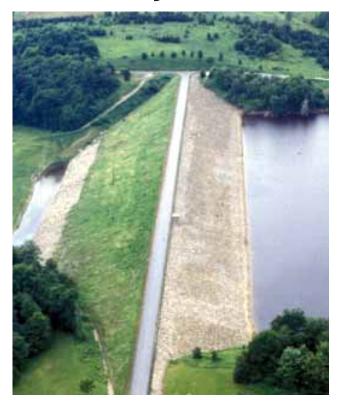
### Lake

Length at maximim pool:	7.4 m.
Maximum Area:	2,290 acres
Elevation above sea level:	
Streambed at Dam:	1,210 ft.
Maximum Pool:	1.278 ft.





# **Union City Reservoir**



## **—BUILDING STRONG<sup>™</sup>**

Union City Reservoir -Physical Address 1438 Middleton Rd. Waterford, PA 16441

Resource Manager's Office 22079 State Highway 198 Saegertown, PA 16433-6213 (814) 763-4422

www.lrp.usace.army.mil/rec/rec.htm

May 2009 CELRP 1130-1-15

# **Project Information**

Union City Reservoir is a unique part of a series of flood control projects in the Pittsburgh District Watershed. Located on French Creek among the rolling hills of Erie County, Pennsylvania, the Union City Reservoir is the only dry-bed reservoir in the district.

Authorized by the Flood Control Act of 1962, the dam was completed in 1971 and provides flood protection for the French Creek Valley, and to a lesser degree, the Allegheny River below Franklin, Pa. The reservoir has the capability of storing the equivalent runoff of 4.08 inches of precipation from its 222 square mile watershed. The flood prevention benefits provided by the project since completion are estimated to be approximately \$21 million.

Although Union City does not provide for typical lake-related activities, it does offer visitors the unusual opportunity to observe the process by which this dry bed reservoir becomes a lake.





The dam functions as an uncontrolled detention structure that automatically stores and releases water during periods of peak flow.

A 520-foot-long concrete conduit, 4.5 ft. by 8 ft., runs through the base of the dam to allow for uncontrolled discharge of waters. The conduit permits normal flows of French Creek to pass through unimpeded. When the amount of water entering the reservoir exceeds the dam's capacity to discharge it through the drainage conduit, a temporary lake is formed.

If the flow of waters into the lake fills the reservoir to capacity the excess waters are then discharged into a side-channel spillway constructed through the right abutment of the dam.

The spillway was designed with a discharge capacity capable of handling the maximum flow of record at the damsite (14,900 cubic feet per second on April 5, 1947). At maximum flood pool Union City Reservoir will extend 7.4 miles up French Creek and cover 2,290 acres. As the water inflow decreases, the stored water gradually drains out, and once again the reservoir bed becomes dry.

The lake forming process usually occurs during late winter and early spring as a result of melting snow and spring rains. The resulting lake usually lasts only two or three months. However, if authorized, the present outlet facilities at Union City Reservoir could be modified to permit the creation of a summer pool of 580 acres.

